

A EUROPEAN DUNG BEETLE,
ONTHOPHAGUS TAURUS SCHREBER, NEW TO THE U.S.
(COLEOPTERA: SCARABAEIDAE)

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ABSTRACT

Onthophagus taurus Schreber 1759, a common European dung beetle, is recorded from the U. S. for the first time from northwestern Florida, central and southwestern Georgia, and southeastern Alabama. No information is available on the method of introduction, but the earliest recorded specimen is from Santa Rosa County, Florida in 1971.

In May 1974, Fincher collected numerous specimens of an unknown dung beetle in areas of Georgia where previous bait traps had not produced the same species. A photograph was sent to Woodruff for identification some time later. He had on hand 3 single specimens from 3 Florida localities. It was immediately recognized as a species not known from the U. S., but it was suspected to be a Mexican species. When a well-developed male was available for study, comparisons were made with all the species present in the Florida State Collection of Arthropods. After detailed study it appeared indistinguishable from the European *Onthophagus taurus* Schreber.

It is the purpose of this paper merely to record the species for the U. S., especially since it is one of the species under consideration for intentional introduction. A more detailed paper is in preparation with complete literature citations, drawings, and distribution maps.

The species appears to have a wide distribution in the Old World, Bal-
thasar (1963:550-551) listing: all of south and middle Europe, North Africa,
Syria, Mesopotamia, Iran, Afghanistan, "Transcaucasien, Kleinasien, Zen-
trallasien". The following U. S. records are listed in approximate chrono-
logical order by state: FLORIDA: Santa Rosa Co., Blackwater R., FAMU
Biol. Sta., 7-VIII-71, W. L. and J. G. Peters (1 female); Madison Co., Madi-
son, 30-XI-74, C. A. Boyles, cowdung (1 female); Jefferson Co., Monticello,
2 mi. E., III-75, R. B. Baker (1 male). GEORGIA: Dougherty Co., 15-V-74,
G. T. Fincher, pit traps baited with swine feces (230 specimens) [dung beetle
trapping for the past 7 years in the area produced none]; Tift Co., Tifton,
VII-74, G. T. Fincher, swine feces bait traps [dung beetles had been trapped
yearly at this site for the past 18 years with no previous specimens of this
species]; Turner Co., (10 mi. N. of Tift Co. site), VII-74, G. T. Fincher (3 speci-
mens); Baker, Calhoun, and Early Counties (20-30 miles west of the
Dougherty Co. site) produced numerous specimens in late 1974; in 1975 the
following Counties were added: Harris, Muscogee, Talbot, Taylor, Peach,
Houston, Dooly, Crisp, Colquitt, Grady, Berrien, Irwin, Coffee, Bacon,
Wayne, Pierce, Ware, Atkinson.

In 1975 it was found in almost every county surveyed in southwest Georgia, southeast Alabama, and the adjacent Florida panhandle. In company with F. Shalaby, a visiting scarab worker from Cairo, Egypt, the authors hand collected it in cow dung at the following Florida localities on 13-VIII-1975: Bay Co., Hiland Park, Rt. 231; Calhoun Co., 1 mi. W. Clarks-ville; Wakulla Co., Medart, Rt. 98; Leon Co., Tall Timbers Res. Station. Fincher's surveys in Alabama produced specific records as follows: Coffee Co., nr. Jack; Pike Co., Troy and Spring Hill; Barbour Co., nr. Clio and Blue Springs; Henry Co., nr. Abbeville, nr. Shorterville, Haleburg, and Columbia.

The species is highly variable, resulting in several named varieties in Europe, based mostly on color or male horn development. Twenty one synonyms are listed in the Junk Catalogue (Boucomont and Gillet 1927). Two curved head horns on major males easily distinguish it from any U. S. species. In Howden and Cartwright's revision of U. S. *Onthophagus* it will key to either *batesi* Howden and Cartwright, a completely shining rather than alutaceus species known from Texas to Panama; or *subtropicus* Howden and Cartwright, but that species has no cephalic horn in the male and the female has the frontal carina elevated each side into a sharp tubercle (a rare species known from 3 specimens from Laguna Madre, 25 mi. SE of Harlingen, Texas). Since Balthasar (1963) listed the size variation from 6 to 11.5 mm, it is difficult to proceed beyond couplet 4 (where it is either more or less than 7.5 mm) in their key.

No direct knowledge is available as to where or how this species was introduced. During surveys it seemed that the number of specimens decreased as the distance increased going north and east from the southwestern corner of Georgia. Since the first specimen was found in Santa Rosa Co., Florida, we suggest that the introduction took place at some coastal locality in the Florida panhandle (e.g., Pensacola). Another foreign (African) dung beetle, *Onthophagus depressus* Harold, was apparently accidentally introduced into Georgia and Florida several years ago (Woodruff 1973), but is not known from the Florida panhandle.

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